

11

applicable, thereby balancing RFI emissions which cannot thereafter propagate in the usual manner but instead collapse by virtue of the equal presence of inversely phased RFI emissions.

The invention may be utilized to provide increased output signal stability and less distortion in the operation of various types of dc-to-ac inverter systems and ac power conditioning systems by applying the output of the inverter system to a symmetrical system output transformer, which inhibits the distorting effects of non-linear reactive loading on the inverter circuitry by balancing and nulling at the grounding reference non-linear reactive-load currents and related power artifacts which commonly cause power distortion in the inverter's output.

The invention may be utilized to limit the propagation of high frequency interference by applying a symmetrical power system to impedance loads to attenuate lower frequency harmonics which then null at ground and which would otherwise propagate and generate ever higher harmonics, "echoing" or "bouncing" back and forth between the power source impedance and the load impedance until the reactive energy has been "dissipated" or spread across a wide bandwidth as is commonly observed in many conventional single phase power circuit applications.

As used herein, the term "isolation transformer" includes step-up and step-down transformers, as well as transformers whose output voltage and input voltage are identical. Also, the terms "primary coil" and "primary winding" are used interchangeably herein as are the terms "secondary coil" and "secondary winding."

I claim:

1. An improved ac generator, said generator comprising: an output winding having a pair of output terminals; a center tap terminal located at the point of mean voltage differential between the two output terminals of said output winding, wherein said center tap terminal is grounded;

12

each of said output terminals of said output winding being connected to an input terminal of said impedance load, wherein said impedance load is grounded.

2. An improved ac generator as in claim 1, wherein said generator is a three phase generator having three output windings, and each of said output windings of said generator is configured such that a center tap terminal is located at the point of mean voltage differential between each of its two output terminals; each center tap terminal is grounded; and each of said output terminals is connected to an input terminal of a three-phase impedance load.

3. A method for improving the performance of an electrical system which includes an ac generator power source having an output winding between two output terminals, said system being connected to an impedance load, said method comprising:

configuring said output winding of said generator such that it comprises a center tap terminal located at the point of mean voltage differential between the two output terminals of said output winding; grounding said center tap terminal; connecting each of said output terminals of said output winding to an input terminal of said impedance load; and

grounding said ground terminal of said impedance load.

4. A method as in claim 3, wherein said generator is a three phase generator having three output windings, said method comprising configuring each of said output windings of said generator such that a center tap terminal is located at the point of mean voltage differential between each of its two output terminals;

grounding each said center tap terminal; connecting each of said output terminals of each said output winding to an input terminal of a three phase impedance load; and grounding each ground terminal of said impedance load.

* * * * *